



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,825	03/22/2004	John D. Bass	02307V-133910US	4243
20350	7590	04/04/2006	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			PASTERCZYK, JAMES W	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,825

Applicant(s)

BASS ET AL.

Examiner

J. Pasterczyk

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/13/06, 3/14/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/13/06</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1755

1. This Office action is in response to the amendment filed 3/14/06 and the IDS filed 3/13/06 and refers to the Office action mailed 9/15/05. The formal and one prior art rejection found therein are overcome by amendment or argument. However, c.f. below for new grounds of rejection, both prior art and formal.

2. Claims 17, 20, 21, 28, 29 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 17 and 35, l. 2, after "selected from" insert --the group consisting of-- for clear closed Markush language.

In claims 20, 21, 28 and 29, "the functional moiety" and "the thermally labile protecting group" lack antecedent basis since there is more than one such group in the composition at these points.

3. The abstract is objected to because it lacks any specific examples of the various thermally labile groups used in the present invention. Correction is required. See MPEP 608.01(b).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 1755

5. Claims 56-58, 62, 63, 65, 66, 70 and 72 are rejected under 35 U.S.C. 102(e) as being anticipated by Markowitz et al., USP 6,660,780 (hereafter referred to as Markowitz) (note ancestry data).

Markowitz discloses the invention as claimed (col. 11, l. 62 to col. 12, l. 9).

6. Claims 1-9, 11, 12, 16, 17, 20-22, 34, 35, 40, 42, 56-58, 62, 63, 65-67, 70 and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Katz and Davis, Nature, vol. 403, 20 January 2000, pp. 286-289 (hereafter referred to as Katz).

Katz discloses the invention as claimed (figure 1; p. 289 "Procedures for imprint cleavage").

7. Claims 34, 35, 38-40, 42, 56-58, 62-70 and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis et al., Chem. Mater. 1996, vol. 8, pp. 1820-1830 (hereafter referred to as Davis).

Davis discloses the invention as claimed (p. 1830, figure 13, structure 9; p. 1832, figure 15).

8. Claims 1, 2, 4-9, 11, 12, 17, 20, 34-37, 39, 40, 56-58, 62, 63, 65-67, 69, 70 and 72 are rejected under 35 U.S.C. 102(a) as being anticipated by Ki et al., J. Am. Chem. Soc., vol. 124, 2002, pp. 14838-14839 (hereafter referred to as Ki).

9. Claims 56-58, 60-63, 65-67, 70, 72 and 73 are rejected under 35 U.S.C. 102(b) as being anticipated by Dai et al., Angew. Chem. Int. Ed. Engl., 1999, vol. 38, no. 9, pp. 1235-1239 (hereafter referred to as Dai I).

Dai I discloses the invention as claimed (p. 1236, left column, middle sections; figure 2).

Art Unit: 1755

10. Claims 56-58, 60-63, 65-67 and 69-73 are rejected under 35 U.S.C. 102(b) as being anticipated by Dai et al., USP 6,251,280 (hereafter referred to as Dai II).

Dai II discloses the invention as claimed (figure 1A, top left three ligands; figure 1B, bottom four ligands; col. 9, l. 27 to bottom; col. 11, structures).

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 10, 13-15 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz as cited above.

The disclosure of Katz has been discussed above.

Katz lacks explicit disclosure that the inorganic oxide may have a planar surface or that the thermolysis may occur at higher temperatures.

However, it is conventional in the art to have planar inorganic oxide surfaces, and it would have been well within the skill of the routineer in the art to perform the thermolysis step at an elevated temperature.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of Katz with a reasonable expectation of obtaining a highly-useful method of making an inorganic oxide imprinted with functional groups and the oxide itself with the expected benefit of the oxide being processable at a range of temperatures depending on the temperature required to cleave the linking group.

Art Unit: 1755

13. Claims 18, 19, 23-27, 30-33, 41, 43-55 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Dai II as cited above.

The disclosure of Katz has been discussed above.

Katz lacks explicit disclosure that a mixture of different ligands may be used to imprint the inorganic oxide.

However, Dai II teaches that a variety of such ligands may be used for this purpose (col. 9, l. 27 to col. 10, l. 8).

It would have been obvious to one of ordinary skill in the art to apply the teaching of Dai II to the disclosure of Katz with a reasonable expectation of obtaining a highly-useful method of making an imprinted inorganic oxide material and the material itself with the expected benefit of the material having more than one specie of binding surface.

14. Applicant's arguments with respect to claims 1-61 have been considered but are moot in view of the new ground(s) of rejection.

15. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 3/13/06 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 1755

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

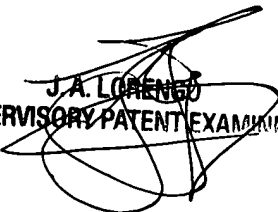
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Pasterczyk

AU 1755

3/29/06



J.A. LORENZO
SUPERVISORY PATENT EXAMINER